

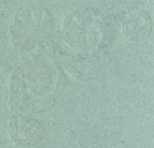
Dungannon
1866 97 E Box 0073
46 d
754
Box I, 97. E

THE
NINTH REPORT

OF THE
Dungannon Society

FOR PROMOTING
SCIENCE, LITERATURE,
AND
THE ARTS.

Dungannon :
PRINTED BY WILLIAM DOUGLAS.
1856.



THE

AMERICAN

OF

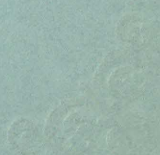
THE

OF

THE

OF

THE



THE

THE
NINTH REPORT
OF THE
Dungannon Society
FOR PROMOTING
SCIENCE, LITERATURE,
AND
THE ARTS.

Dungannon :
PRINTED BY WILLIAM DOUGLAS.

1856.

THE
NINTH REPORT
OF THE
Birmingham Society
FOR PROMOTING
SCIENTIFIC LITERATURE
Stand still, and consider the wondrous works of God—Job, xxxvii, 14.

3804/800134801.

HR
27.8.96

AT THE ANNUAL MEETING of the Dungannon Society for promoting Science, Literature, and the Arts, held in the Society's House, on Tuesday the 5th Feb. 1856,

ROBERT EVANS, Esq., in the Chair,
the following Resolutions were unanimously adopted :

1—That the following Noblemen and Gentlemen, as recommended by the Council, do constitute the Officers of the Society for the ensuing year :

Patron.

THE EARL OF RANFURLY.

President.

THE VISCOUNT NORTHLAND.

Vice-Presidents.

Lord C. Hamilton, M.P.	Edward Evans, Esq.
Hon. H. L. Corry, M.P.	Edward Litton Esq.
Hon. Wm. S. Knox, M.P.	Richard Nun, Esq.
John Y. Burges, Esq. D.L.	Thomas Greer, Esq.
James Corry Lowry, Esq.	Rev. John R. Darley.

Council.

Rev. William Quain, Chairman.

John M. McAvoy, Esq.	Robert Wray, Esq.
G. E. Stuart, Esq.	Robert Evans, Esq.
A. M. Lyle, Esq.	Mr. John McClelland
Rev. F. H. Ringwood.	Mr. Jonathan Turner
Courtenay Newton, Esq.	Mr. Wm. McClelland
Wm. H. Davis, Esq.	Dr. James Hamilton
Rev. Chas. L. Morell.	Mr. John O'Neill.

Edwd. Evans, Jun., Esq., Treasurer

William Nevill, Esq. M.B. } Secs.
Richard Williamson, Esq. }

Wm. H. Davis, Esq. } Auditors.
Mr. George Moon. }

2—That the Report now read be adopted,' printed, and circulated under the direction of the Council.

3—That the earnest thanks of this Society be offered to the Rev. Wm. Quain for his unceasing diligence and success in furthering the objects of our Institution.

4—That the warmest thanks of the Meeting are hereby tendered to the Treasurer and Secretaries for the very zealous and efficient manner in which they have discharged their duties.

5—That the marked thanks of the Meeting be offered to Robert Evans, Esq. for his conduct in the Chair, on the present occasion, and for the strong interest he has taken in the Society, from the earliest period of its existence.

5

REPORT,

&c.

THE commencement of another year imposes on the Council the necessary duty of rendering an account of its proceedings during that which is past; while it affords a suitable occasion for offering such general observations as may be calculated to exhibit the Society's usefulness and promote its interests.

The Council takes the earliest opportunity which has been presented to tender its cordial thanks to the Committee of Provincial Lectures, for the liberal manner in which they have responded to applications for aid, towards having Public Lectures delivered before this Society; and for sending to them Lecturers of such distinguished ability, and so competent to discharge the important duties with which they were entrusted. They anticipated that the eminent persons whose names are placed on that Committee would administer their trust in a manner highly beneficial to the public, and experience has proved that their anticipations have not been disappointed.

The Council, entertaining a strong belief that Industrial Exhibitions would exercise great influence in promoting the cause of Science, Literature, and the Arts, has watched with considerable interest the several great Exhibitions which have constituted so striking a feature in the civilization of the present age. They referred, in one of their Annual Reports, to the Exhibition which was held in London, and which so preeminently illustrated the power of man over the rude materials with

which he is surrounded ; as also the agencies which are employed, and the processes which are adopted, for working them into such transformations as only fall short of creative power ; in another they noticed that which shed such signal lustre on the metropolis of Ireland, and which they hailed as the harbinger to this country of a brighter era, and as an earnest of future triumphs of national industry ; and referring now to the Great Exhibition held in Paris, “ which offered a grand spectacle to the world, and to which, during a serious war,—from all parts of the world—men the most distinguished in Science, Arts, and Industry, flocked to exhibit their productions,”* they would express their high satisfaction that it was crowned with such decided success ; a satisfaction enhanced by the gratifying circumstance, that several prizes were awarded to competitors from this country.

The Council has not failed to inculcate, in every way within its reach, how indispensable for promoting the material interests of a country,—for furthering its agricultural, manufacturing, and general commercial pursuits, is knowledge ;—knowledge of the physical laws and principles by which the Great Creator guides and governs the world. What wondrous results have followed from the knowledge, for example, of the laws which govern Magnetism, Electricity, Heat ! In illustration of these, it is only necessary to point to the Steam Boat—the Railway—the Electric Telegraph.

That mighty agent—Steam—has laid the foundation of the grandest achievements of human industry ; has imparted to manufactures a power and an extension previously not only unknown but unimagined ; and in its application to the great iron highways of modern

* Speech of the Emperor of the French at the closing of the Exhibition.

times, has well nigh annihilated time and space, by the rapid communication it has introduced between the most distant countries of the globe.

The Council has viewed with great interest the spreading of the great Railway network through Ireland, and has derived peculiar satisfaction from its reaching this locality, by the extension of the line from Portadown to Dungannon: an extension long thought of—perseveringly sought after—and now at length in course of being brought to a successful completion.

When this desirable result shall have been achieved it may then be expected that—in addition to the facility of travelling and numerous commercial advantages—by the aid of the Railway's associate, the Electric Telegraph, flashing its messages with the rapidity of lightning, the earliest possible intelligence will be made available to this part of the country.

Railway extension in Ireland, as essential for developing its productive resources, has been ably enforced by several writers; and to its additional tendency to open up the country generally, and to bring more prominently into notice the natural beauties of the country and its picturesque scenery, the present accomplished Lord Lieutenant has happily alluded, in the following terms: “By this means, with an ease and rapidity scarcely imagined before, access has been given from all parts of the world, I may say, to the very choicest temple of Nature herself, which had been comparatively closed up in its rocky fastnesses, until the enterprise and genius of man, with slight elastic iron touch, bridged the quaky bog, and pierced the primeval mountain.”

Influenced by such considerations as the preceding,

the Council felt most desirous that a Course of Lectures on Natural philosophy, as including the important subjects now referred to, should be delivered before the Society; and after application had been made to the Committee of Provincial Lectures, they were enabled to secure, for that purpose, the services of Dr. JOHN BARKER, M.R.I.A.

The Course of Lectures given by this learned Professor was very comprehensive, and travelled over an extensive field. It embraced Heat in the application of its laws to the Arts, the Railway Locomotive, &c.; Magnetism; Electricity; Lightning; the Voltaic Batteries; Electro-Magnetism; the Electric Telegraph, &c.*

These Lectures were considered most valuable, and afforded much gratification by the instructive topics they introduced, and the successful experiments by which they were illustrated.

The Council's attention was next directed to Chemistry—a science whose laws exercise a wide-spread rule in the Arts, in Manufactures, in Medicine, and in the manifold departments of the Human Economy.

To this Science, in its extensive usefulness and practical application to the purposes of life, the following testimony is borne by one of the most distinguished Philosophers of the present day:

“ The transformations of Chemistry, by which we are enabled to convert the most apparently useless materials into important objects in the arts, are opening up to us every day sources of wealth and convenience, of which former ages had no idea, and which have been pure gifts of Science to man. Every department of Art has felt their influence, and new instances

* The Course was commenced on Wednesday, 31st Jan., 1855, and continued on the following Fridays, Mondays & Wednesdays, to the close.

are continually starting forth of the unlimited resources which this wonderful science develops in the most sterile parts of nature. Not to mention the impulse which its progress has given to a host of other sciences, what strange and unexpected results has it not brought to light in its application to some of the most common objects! Who, for instance, would have conceived that linen rags were capable of producing more than their own weight of sugar, by the simple agency of one of the cheapest and most abundant acids? That dry bones could be a magazine of nutriment, capable of preservation for years, and ready to yield up their sustenance in the form best adapted for the support of life, on the application of that powerful agent—Steam—which enters so largely into all our processes, or of an acid at once cheap and durable? That saw-dust itself is susceptible of conversion into a substance bearing no remote analogy to bread; and though certainly less palatable than that of flour, yet no way disagreeable, and both wholesome and digestible, as well as highly nutritive? What economy in all processes where chemical agents are employed, is introduced by the exact knowledge of the proportions in which natural elements unite, and their mutual power of displacing each other! What perfection in all the arts where fire is employed, either in its more violent applications, (as, for instance, in the smelting of metals by the introduction of well adapted fluxes, whereby we obtain the whole produce of the ore in its purest state,) or in its mildest forms, as in sugar refining (the whole modern practice of which depends, on a curious and delicate remark of a late eminent scientific chemist, on the nice adjustment of temperature at which the chrysalization of syrup takes place); and a thousand other

arts which it would be tedious to enumerate." *

The Council succeeded in having a Course of Lectures on Chemistry, applied to the Arts and Manufactures delivered before the Society, by Dr. EDMUND WILLIAM DAVY, lecturer on Chemistry to the Carmichael School of Medicine, Dublin.† These lectures were very interesting and instructive, and by their varied detail and striking experiments, won the well merited approbation of the numerous assemblages by which they were attended.

The Council feels great pleasure in stating, that the Courses of Lectures which they have now noticed were, severally, listened to by attentive and crowded audiences, who evinced a growing taste for, and an increasing interest in the important subjects which were illustrated.

The best thanks of the Council are offered to Major the HON. STUART KNOX, M. P. for several important works on Statistical subjects, which, with those presented by him in previous years, form a valuable accession to the Library.

The Reading Room is well supplied with several of the leading literary Periodicals of the day, and also with the principal English and Irish Newspapers.

The Cases in the Lecture Room containing Shells, Minerals, Fossils, &c. continue to be inspected by numerous visitors, to whom they appear to afford much gratification.

To conclude:—The Council has observed, that some—not here but elsewhere—of well meaning but timid minds, appear to entertain the opinion that literary

* "Discourse on the Study of Natural Philosophy," by Sir John Herschel.

† The Course was commenced on Wednesday, August 22nd, 1855, and continued on the following Fridays, Mondays & Wednesdays to the close.

and scientific culture, in reference to the operative and humbler classes, is open to objection from its tendency to produce discontent with their station, and so to unfit them for the discharge of their duties. That there is no valid foundation for any such apprehension may, without difficulty, be proved from general principles, and from illustrative evidence taken from ordinary life among such classes. But, as it is always satisfactory to receive instruction from current events—from events that are passing under present notice, and vividly impressing themselves on the mind—recourse may be had, on this occasion, to very interesting evidence furnished by the all-engrossing subject of the day—the war. It has not been found that soldiers are unfitted for their duties by being better educated than they formerly were. An appeal may be made to the graphic and stirring letters sent by soldiers from the seat of war,* and the question asked, whether, because these have been written so graphically, the writers have fought less bravely? Have the soldiers been unfitted for their arduous duties—rendered less able to bear the toil of the trenches and the terrors of the battle field, because—as has been signally brought to light—their minds have been informed, and their sympathies cultivated? The contrary of this has been found to be the fact; namely, that education has imparted strength and cheerfulness in the performance of duties the most difficult; and it may be further confidently asserted, that in proportion as the armies of this country exhibit an organization not merely of numbers and physical strength, but also of intelligence—of reliance on the influence of mind and the succours of science—they will

* Those written by an Irishman—Sergeant O'Flaherty—Interpreter to the Army in the Crimea, and inserted in the *History of his Life*, lately published—are well worthy of the notice they have attracted.

be rendered effective in fulfilling the important function now assigned to them, that of resisting systematic aggression, and defending the independence of nations.

The Council would generalise the statement and maintain, that in whatever position men may be placed, they will be the better enabled to discharge their duties because their minds have been educated; and from this they would derive an argument—and a conclusive one as they consider—in favor of the diffusion of Education; in support of literary and scientific Institutions, and of all agencies whose purpose is rightly to inform the public mind, and especially the mind of the humbler classes.

Among such agencies this Society takes its place, and ranges its resources; and the Council bespeaks on its behalf an increased interest and an enlarged measure of public support.

The Society addresses itself to all classes, but particularly to what may be designated as the operative and the industrial. Among these it would cherish a taste for learning; it would afford them the means of improving their minds; it would invite them to its Lectures and Library; and thus it would teach them that "knowledge is power;" it would enable them to keep pace with the times, and to engage with success in that race of competition which all must run who depend, under Providence, on their labour—whether manual or mental—for their daily bread.

WILLIAM QUAIN,

Chairman.

The Society's House, 2
Feb. 5, 1856. §

Members' Names.

Subscribers of £1. annually. Subscribers of 10s. annually.

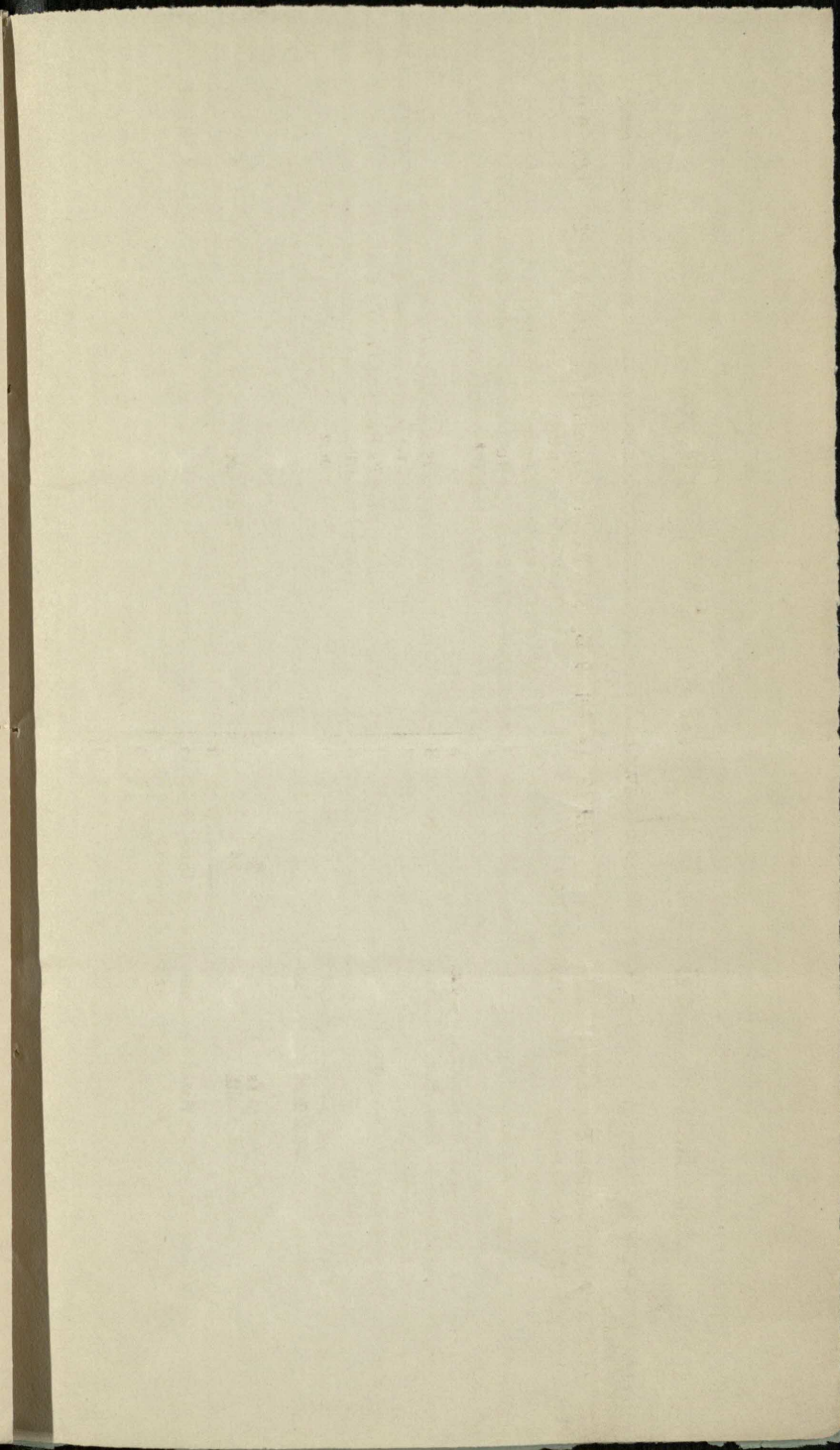
Year ending Jan. 1, 1856.		Year ending Jan. 1, 1856.	
John Ynyr Burges -	£1	Rev. Joseph Acheson	10s 0
Hon. H. Corry, M.P. -	1	Robt. J. Acton ..	10 0
John Cranston -	1	William Barton ..	10 0
Rev. J. R. Darley -	1	George Bothwell ..	10 0
William H. Davis -	1	James Brown ..	10 0
Edward Evans -	1	James Creagh ..	10 0
Robert Evans -	1	J. C. Davidson ..	10 0
Edward Evans, jun. -	1	Samuel L. Douglas ..	10 0
William Forster -	1	John Frizell ..	10 0
Thomas Greer -	1	James Hamilton ..	10 0
Lord C. Hamilton, M.P. 2 yrs	2	Doctor Hamilton ..	10 0
James E. Jackson -	1	Thomas Hamilton ..	10 0
Hon. Major Knox, M.P. -	1	Valentine Holmes ..	10 0
Edward Litton -	1	James Irwin ..	10 0
James C. Lowry -	1	John M'Clelland, jun. ..	10 0
Alexander M. Lyle -	1	Joseph M'Clelland ..	10 0
Rev. C. L. Morell -	1	Wm. M'Clelland ..	10 0
John M. M'Avoy -	1	Adam M'Cullagh ..	10 0
Courtenay Newton -	1	Wm. Matthew ..	10 0
Richard Nunn -	1	W. J. Mines ..	10 0
Rev. William Quain -	1	George Moon ..	10 0
Rev. F. H. Ringwood -	1	Doctor Morgan ..	10 0
George E. Stuart -	1	James Morrow ..	10 0
Richard Williamson -	1	Wm. Nevill, M.B. ..	10 0
Robert Wray. -	1	John O'Neill ..	10 0
		Samuel Pounder ..	10 0
	£26	Charles Reilly ..	10 0
		George Slevin ..	10 0
		Charles Stanley ..	10 0
		Robert Simpson ..	10 0
		John Stevenson ..	10 0
		Richard Tener ..	10 0
		Jonathan Turner ..	10 0
		Rev. Thomas Twigg ..	10 0
			£17 0 0

Dr. THE DUNGANNON LITERARY SOCIETY IN ACCOUNT WITH EDWARD EVANS, JUN., TREASURER, Cr.

1855.		1855.		1856.	
Jan. 4	£6 Balance due Treasurer	..	£12 13 1½	Feb. 9	Earl Ranfurly's annual subscription for 1855, £3 0 0
Feb. 8	Paid for Newspapers and Periodicals for 1855, as ordered	..	14 11 0	24	The Viscount Northland's ditto 2 0 0
Mar. 29	New grate in Council Room	..	12 4	Sept. 22	Dr. Barker's Lectures on Electricity, tickets sold, 17 3
-	Bloomfield, Postage Account	..	1 4 11	Dec. 22	Dr. Davy's Lectures on Chemistry, tickets sold, 1 7 0
31	Douglas, acct. Printing Report, &c.	..	6 4 5	1856.	Newspapers & Periodicals, for 1855, sold for 7 13 0
Apl. 30	Remittance R. Ball, Esq. L.L.D.	..	10 0 3	Jan. 9	½ year's rent to 12th Sept. 1855, from Railway Co. 4 0 0
June 25	Insurance on £350.	..	17 6		1 year's rent to 1st inst. from Edwd. Evans, jun. 8 0 0
July 25	Bloomfield, Fuel Account	..	7 10 0	30	Proportion Poor's Rate and Income Tax, charged on rent .. 1 1 0
-	do. Sundries	..	9 6		Annual Subscribers of £1 to 1st Jan. 1856. £26 17
Augt. 2	Poor's rate struck Nov. 23, 1854 at 9d	..	0 9 0	Do.	of 10s to do. —43 0 0
1856.	Income Tax, 1st & 2nd moiety 1854-55	..	0 14 0		
Jan. 30	Gaslight, one year to 1st inst. Less per Alex. Smith	£3 7 9 - 14 0			Balance due Treasurer .. 8 18 6½
-	Police Tax, Poor's Rates & Income Tax, for 1855	2 13 9			79 16 9½
-	Building Co. one year's Rent, per new agreement to first November, 1855.	1 17 0			
		20 0 0			
		£79 16 9½			

Xd. GEO. MOON.
Exd. WM. DAVIS.

(No. 9)



Incl



Dublin

Dr Ball

Mur